Design Requirements

Design requirements for thoroughfares vary according to the desired capacity and level of services to be provided. Universal standards in the design of thoroughfares are not practical. Each street section must be individually analyzed and its design requirements determined on the basis of amount and type of projected traffic, existing capacity, desired level of services, and available right-of-way.

Typical cross section recommendations are shown in Figure C-2. Cross section "A" is typical for controlled access freeways. The 46 foot grassed median is the minimum desirable median width, but there could be some variation from this depending upon design considerations. Slopes of 8:1 into 3 foot drainage ditches are desirable for traffic safety. Right-of-way requirements would typically vary upward from 228 feet depending upon cut and fill requirements.

Cross section "B" is typical for four lane divided highways in rural areas which may have only partial or no control of access. The minimum median width for this cross section is 30 feet, but a wider median is desirable. Design requirements for slopes and drainage would be similar to cross section "A", but there may be some variation from this depending upon right-of-way constraints.

Cross section "C", seven lane urban, and cross section "D", five lane urban, are typical for major thoroughfares where frequent left turns are anticipated as a result of abutting development or frequent street intersections.

Cross sections "E" and "F" are used on major thoroughfares where left turns and intersecting streets are not as frequent. Left turns would be restricted to a few selected intersections.

Cross section "G" is recommended for urban boulevards or parkways to enhance the urban environment and to improve the compatibility of major thoroughfares with residential areas. A minimum median width of 24 feet is recommended with 30 feet being desirable.

Typical cross section "H" is recommended for those road segments with minimal mid-block turning movements and restricted right-of-way, where traffic projections indicate a need for a multi-lane cross section. An additional left turn lane would probably be required at major intersections.

Thoroughfares which are proposed to function as one-way traffic carriers would typically use cross section "I". Cross section "J" and "K" are usually recommended for minor throughfares since these facilities usually serve both land service and traffic service functions. Cross section "J" would be used on those minor throughfares where parking on both sides is needed as a result of more intense development.